

What is claimed is:

1. A device for holding an object, said device comprising:

a base;

at least three posts affixed to and extending from said base, said posts disposed

5 substantially equidistant from a center reference point;

at least three followers, wherein each of said followers is pivotably attached to one of said posts and comprises a gripping portion for gripping the object,

at least three linkages dimensioned to rotationally link each of said followers such that movement of one of follower causes all of said followers to pivot synchronously; and

10 an adjustable actuator in communication with said followers, said actuator being shaped and dimensioned to cause said followers to rotate about said posts;

wherein said followers and linkages are dimensioned and disposed such that a movement of one follower causes each of said followers to pivot in unison about said posts such that said gripping portions remain in substantially equidistant relation from the center
15 reference point regardless of a degree of rotation of said followers.

2. The device of claim 1 wherein said actuator comprises a nut rotationally attached to one of said linkages and a threaded fastener disposed in communication with said nut.

3. The device of claim 1 wherein said actuator comprises a gear rotationally attached to one of said linkages and a drive screw disposed in communication with said gear.

20 4. The device of claim 1 wherein each of said gripping portions is a non-deforming pin attached to each of said followers.

5. The device of claim 4 wherein each pin is removably attached to each of said followers.

6. The device of claim 4 wherein each of said pins is dimensioned to grip an inside diameter of a bore.

5 7. The device of claim 1 further comprising a housing extending from said base, said housing comprising at least one side wall and a cover.

8. The device of claim 7 wherein each of said cover and said base comprise an opening therethrough, said opening having a centerline that is substantially aligned with the center reference point.

10 9. An assembly for holding and rotating an object, said assembly comprising:
a device for holding an object, said device comprising:

a base;

at least three posts affixed to and extending from said base, said posts disposed substantially equidistant from a center reference point;

15 at least three followers, wherein each of said followers is pivotably attached to one of said posts and comprises a gripping portion for gripping the object,

at least three linkages dimensioned to rotationally link each of said followers such that movement of one of follower causes all of said followers to pivot synchronously; and

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an adjustable actuator in communication with said followers, said actuator being shaped and dimensioned to cause said followers to rotate about said posts;

wherein said followers and linkages are dimensioned and disposed such that a movement of one follower causes each of said followers to pivot in unison about said posts such that said gripping portions remain in substantially equidistant relation from the center reference point regardless of a degree of rotation of said followers; and

spinning means for attaching to and spinning said device about an axis extending

through said center reference point.

10. The assembly of claim 9 wherein said actuator of said device comprises a nut rotationally attached to one of said linkages and a threaded fastener disposed in communication with said nut.

11. The assembly of claim 9 wherein said actuator of said device comprises a gear rotationally attached to one of said linkages and a drive screw disposed in communication with said gear.

12. The assembly of claim 9 wherein each of said gripping portions is a non-deforming pin attached to each of said followers

13. The assembly of claim 9 further comprising a housing extending from said base, said housing comprising at least one sidewall and a cover.

14. The device of claim 13 wherein each of said cover and said base comprise an opening therethrough, said opening having a centerline that is substantially aligned with the center reference point.

15. The assembly of claim 10 wherein said spinning means is a spin jig.

5 16. The assembly of claim 10 wherein said spinning means is a machine tool selected from a group consisting of a milling machine, drill press and a lathe.